

**Before the
Federal Communications Commission
Washington, DC 20554**

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Federal Communications Commission
Office of the Secretary

In the Matter of)	
)	
Implementing a Nationwide, Broadband,)	PS Docket No. 06-229
Interoperable Public Safety Network in)	
the 700 MHz Band)	
)	
Development of operational, Technical and)	WT Docket No. 96-86
Spectrum Requirements for Meeting Federal, State)	
and Local Public Safety Communications)	
Requirements Through the Year 2010)	

To: The Commission

COMMENTS OF NTCH, INC.

NTCH, Inc. is pleased to submit these comments in the above-referenced proceeding.¹

As a growing Tier III carrier with PCS operations in many communities around the country, NTCH believes that the Commission's innovative proposal could, if properly modified and implemented, serve both to expedite and enhance public safety access to the 700 MHz spectrum and to make unneeded or excess spectrum available to commercial carriers who need additional spectrum for the feature-rich applications which the public increasingly expects. However, the plan as initially outlined by the Commission is not realistic, is unnecessarily costly, will not leverage existing relationships between public safety entities and local carriers, will be more vulnerable to terrorist threats, and will likely never be built out. NTCH's alternative proposal, laid out below, would eliminate these issues.

¹ *In the Matter of Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band*, PS Docket No. 06-229, FCC 06-181, rel. December 20, 2006 ("NPRM").

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I. THE NATIONWIDE LICENSEE

The Commission's proposal relies heavily on a single nationwide, non-profit licensee to deliver the services to public safety which are needed. NTCH agrees that there are numerous benefits to a unified nationwide license in terms of standardization of equipment and protocols, interoperability, volume equipment discounts, efficiency of operation, avoidance of interference, and the other benefits cited by the Commission. However, the Commission envisions that the nationwide licensee would have experience with public safety coordination, have the ability to "directly represent all public safety interests," and, most significantly, have no commercial involvement either through ownership or management. *NPRM* at Para. 27.

This structure seems unworkable in the real world for several reasons. The cost to build out a system on the scale outlined by the Commission would easily be in the hundreds of millions, if not billions, of dollars. The network described by the Commission is an undertaking comparable to building the pyramids or putting a man on Mars, an operation on a scale vaster than any single communications network ever built in the United States. It is unclear how a non-profit entity of the kind envisioned by the Commission, an entity with no commercial ownership, experience or management, would even be able to raise the funds necessary for an operation of this scope. Raising funds in the financial markets would be especially difficult since the degree of participation by public safety entities would be unknown. Few such entities would be able to make any sort of advance financial commitment to the project whatsoever, given the usual year to year funding imbroglios to which such entities are unfortunately subject.

How then to secure the benefits of a nationwide license while harnessing the enormous access to capital, management expertise and technical expertise which commercial carriers have in abundance? NTCH's proposal would be to have a single nationwide non-profit licensee as

envisioned by the Commission. However, instead of divorcing this creature from commercial carriers, it would be made up of them. Membership in the limited liability company licensee would be open to any carrier licensed by the FCC who is willing to participate. Each participating carrier would:

1. Build out 700 MHz facilities at its own expense according to universal technical and equipment standards set by the national licensee;
2. Be eligible to elect the governing board of the national licensee, along with public safety representatives;
3. Lease commercial use of the entire 12 MHz of 700 MHz allotted for this purposes on a fully preemptible basis coincident with public safety use of the same spectrum; and
4. Contribute capital or loan guarantees to the nationwide entity in proportion to its use of the spectrum.

The nationwide licensee would be governed by a board chosen by its members, perhaps including tiered representation to ensure that all classes of carriers had a voice in the system's governance. In addition, there would be representation on the board by public safety entities who themselves participate in the use of the network. There would be a limited professional staff necessary to oversee nationwide networking.

There are numerous benefits to this proposal. First, the cost of constructing the local facilities is spread out over numerous carriers. Each would be relying on its own sources of financing to construct facilities which would serve the public as well as the commercial carrier's needs. Moreover, because the carriers would not need to create new infrastructure such as buying or erecting new towers, microwave facilities and back offices, the overall cost of the build-out would be reduced by an estimated factor of ten. What would be a daunting billion dollar construction project if undertaken by a single entity becomes significantly diminished

when dispersed among hundreds of interested carriers. The result would be that the network available to public safety would be built much faster than could otherwise possibly be the case, and because the construction costs would be significantly less, the usage fees charged to public safety could also be significantly lower.

Second, the plan would be inclusive rather than exclusive. Public safety operations tend to be local, not national, in character. Many smaller carriers maintain close coordination with local police and fire departments which sometimes use commercial facilities when dedicated public safety spectrum is not available or is inadequate. These personal relationships are extremely important in addressing local problems, dealing with local emergencies, and building a system that meets the needs of the public safety personnel who will be using it. Local carriers such as NTCH expect that they could implement the 700 MHz networks in conjunction with local officials in a way that a national behemoth with no local presence could not hope to achieve. Permitting participation by smaller regional and local carriers also has the effect of spreading the benefits of the available spectrum widely among both large and small businesses, as contemplated by Congress for auctioned services. 47 U.S.C. 309(j). At the same time, no one would be getting a free ride; each participating carrier would be contributing proportionally to the national entity as well as fulfilling its obligation to deliver 700 MHz service over its local facilities. The relationship between the nationwide licensee and the participating carriers would be based on a standardized lease setting forth strictly the terms of use of the spectrum.

Third, as contemplated by the Commission, local public safety entities could participate in the service on a usage basis. This would have the economic effect of encouraging the public safety community to use the spectrum productively and efficiently and within allocated budgets. We would expect that the usage fees set for the public safety community would be significantly

below market rates for commercial cellular service to reflect the fact that the service was being provided over spectrum allocated to that community. At the same time, there is no free lunch and obviously the public safety community would have to pay fees sufficient to sustain the network. The amount needed to cover that nut, however, would be reduced by making a portion of the spectrum available for commercial use. That use would permit participating carriers to recoup a portion of their costs using the same infrastructure which had been established for the public safety network.

Public safety and commercial operations would share the use of the same spectrum rather than inefficiently setting aside some spectrum for commercial and some for safety. The network would be intelligent enough to simply give priority to calls to or from public safety participants in the system, but all users would share the same basic facilities. NTCH believes that in virtually all rural areas and many urban ones, this would afford more than enough capacity to handle public safety's needs while leaving enough "excess" capacity to make the venture commercially feasible for participating carriers.

Fourth, participating carriers would contribute to construction and management of the national infrastructure through payments to the national licensee. The function of the national licensee would be to set network standards (such as interface protocols, channel allocations, etc.), develop the network plan, establish appropriate fee schedules for public safety entities, and maintain a small staff for on-going network issues and system administration. The national licensee would be managed by a small executive team selected by a board of governors elected by participating carriers. The governing board would be structured to include all tiers of carriers, and would also include representatives of the public safety community. Financial contributions required to fund the national licensee's activities would be weighted according to

overall usage of the spectrum by participating carriers. The Commission would retain some oversight function over the licensee to ensure that its actions comport with the goals and purposes of the service.

Fifth, NTCH believes that the system resulting from a nation-wide consortium of carriers would be significantly more robust and terrorist-resistant than the single monolithic structure envisioned by the Commission. In the formulation put forth by the Commission, the system would be centralized and therefore subject to being “cut off at the head.” In the community-based and carrier-based formulation presented here, individual participating carriers would be unlikely to be knocked out by any attack on the nationwide superstructure. In particular, by dispersing participation among many smaller local carriers, the Commission would ensure that numerous switches would be available to provide interconnection in the event of an emergency. A monolithic licensee would tend to centralize switching functions in a few locations (as the Tier I carriers do today). While this makes economic sense, it leaves the system open to massive disruption if the connecting arteries to these centralized switches are broken (as has happened, unfortunately, in the recent past). The model based on numerous smaller, carriers independently “contributing” their facilities to the program in an organic way is much more impervious to attack or natural disaster because traffic can simply be diverted to other points of interconnection. As a general rule, the more diffuse and redundant a system is, the harder it is to knock it out.

Locally based carrier-participants would also be able to react immediately and locally to any attack on the local networks, dispatching their own personnel in the vicinity to repair damaged facilities or arrange work-arounds where facilities have been destroyed. It would be very difficult to have centralized management orchestrate such efforts in a remote local

community and very expensive to maintain the technical staff necessary to handle such problems. In the NTCH proposal, the existing technical staff of the participating carriers would be instantly and locally available to tackle terrorist or weather-related outages, not to mention routine maintenance. Local management would also be able to work closely with local public safety officials to prioritize, if necessary, the facilities that should be restored most quickly. This structure leverages the participation of local carriers so as to reduce the overall costs of the system to a sustainable level while ensuring rapid response to emergency conditions.

One structural element which must be addressed is how to allocate the available spectrum among carriers where multiple carriers in the same market choose to participate. To simplify the process and improve system robustness, participation would be handled on a metropolitan or city-wide basis, or in rural areas on a basis that coincides with public safety's jurisdictional areas. If two carriers in a particular region chose to participate, both could do so. This would provide some redundancy to the facilities. It would not make sense to cut the spectrum up any more than that since too little might be left for any carrier to use productively. Accordingly, if more than two carriers offer to participate, the two participating carriers would be selected based on the reliability and security of the systems participating. A group of local public safety organizations who express the intent to participate in the local network could check out the facilities of the potentially participating carriers and decide which ones best serve their needs for coverage, reliability, and security. Their decision would be final.

All of this assumes that the structure envisioned here would qualify as a "public safety service," as required by Congress for allocation of this particular spectrum. Under the Congressional definition, public safety services must have "the sole or principal purpose" of protecting life, health or property. As proposed here, the service would be "principally" devoted

to public safety functions since all of it would be unconditionally preemptible by public safety.² In addition, the statute requires that public safety services not be “made commercially available to the public by the provider.” The Commission seemed to recognize in its own formulation that commercial usage of this spectrum is permissible though the basis for that conclusion was not set forth. The easiest route to compliance with the statutory mandate is to designate the nationwide licensee as “the provider” for purposes of the statute. The law requires that the public safety services be provided either by state or local government entities or by “nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services.” The nationwide licensee would be authorized by the Commission’s Public and Homeland Security Bureau – a governmental entity whose primary mission is, of course, the protection of life, health and property. At the same time, the nationwide licensee would not itself be making services commercially available to the public. That aspect of the structure would be handled by the participating carriers who are not themselves the provider. To make this parsing of the statute work, however, the nationwide entity would have to be the “provider” of the actual public safety services, which could be accomplished by having the participating public safety entities “subscribe” to the service for a usage fee. This organization of the matter would ensure that all statutory strictures are met, though ultimately a statutory blessing would eliminate any possibility of doubt on this score.

II. CONCLUSION

NTCH commends the Commission for thinking outside the box in an effort to speed 700 MHz service to the public safety community. It urges the Commission to adopt this revised

² The term “principal” simply requires that the denoted use be “first in rank, authority, importance” (Webster’s New World Dictionary, 1984); the structure envisioned here would plainly accord public safety that status.

version of the original proposal to make the resulting network less costly, more reliable, more resistant to attack, and far more rapidly deployable.

Respectfully submitted,

NTCH, Inc.

By _____/s/_____
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President